STATEMENT OF LEGAL AND FACTUAL BASIS

Georgia-Pacific Wood Products LLC
234 Forest Road, Skippers, Virginia
Permit No. PRO50941

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Georgia-Pacific Wood Products LLC has applied for a Title V Operating Permit for its Skippers, Virginia facility. The Department of Environmental Quality (DEQ) has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:
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Air Permit Manager:_____ Date:
James E. Kyle, P.E.

Deputy Regional Director:_____ Date:
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FACILITY INFORMATION

Permittee/Facility
Georgia-Pacific Wood Products LLC – Skippers OSB
P.O. Box 309
Skippers, VA 23879

Responsible Official
Mr. Jerry Brown
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Registration No.: 50941
County-Plant No.: 081-0037

SOURCE DESCRIPTION

The facility is an oriented strand board (OSB) manufacturing facility (SIC 2493/NAICS 321219 – reconstituted wood product manufacturing) which is operated by Georgia-Pacific Wood Products LLC (GP). The OSB manufacturing operations include log debarking, log flaking, wood chipping, flake drying, blending, mat forming, board pressing, sanding, trimming, edge seal coating, and woodwaste handling operations.

The facility is a major source of particulate matter (PM), PM-10, nitrogen oxides, carbon monoxide (CO) and volatile organic compounds (VOC). The facility is located in an attainment area for all pollutants (Greensville County) and is currently considered to a minor source (<250 tons/yr potential-to-emit (PTE) for all pollutants) for the purposes of the new source review (NSR) permitting program. The facility is currently permitted by a NSR permit dated February 5, 2009. This is a facility-wide permit covering all the major areas of the plant, including wafer drying operations, board pressing operations, material handling operations, and combustion operations. The facility was issued an initial Title V (TV) permit on January 12, 2003. Therefore, pursuant to 9 VAC 5-80-80 C3, the facility submitted a TV renewal application on May 11, 2007. The renewal application was deemed administratively complete on July 16, 2007.

COMPLIANCE HISTORY

The facility was originally constructed in 1985 in accordance with a construct and operate permit issued in 1984. This 1984 permit did not include VOC emissions, as none were reported by GP. Subsequent to these events, it was discovered that there were VOC emissions from the board pressing and wafer drying operations of this facility, as well as other OSB plants around the country, at NSR major source (>250 tons/yr) levels. Subsequently, GP agreed to a consent order with DEQ and the United States Environmental Protection Agency (EPA) to limit the VOC emissions below 250 tons/yr by installing VOC control equipment at the Skippers OSB plant in lieu of obtaining a major NSR permit. The VOC control devices, two Regenerative Thermal Oxidizers (RTO), were installed and began operating in 1997. In their May 2007 TV renewal application, the facility reports that they are currently in compliance with all applicable requirements. In the most recent compliance evaluation by DEQ staff, January 21, 2010, the facility was not found in violation of any state or federal requirements.

EMISSION UNITS

The emission units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
1000/1350	11	Chipper/green chip handling system	1.8 dry tons/hr	Classic Systems - 5' diameter cyclone	CYC-1	PM/PM-10	February 5, 2009
1100	Fugitive	Log preparation area	225 tons/hr	None	N/A	N/A	February 5, 2009
1200	Fugitive	Log debarking	225 tons/hr	None	N/A	N/A	February 5, 2009
1300	Fugitive	Block preparation area	225 tons/hr	None	N/A	N/A	February 5, 2009
3000	52A & B	<u>Wellons/flake dryer system</u> a. One Wellons 4-cell wood fuel combustion system (primary flake dryers) b. One Wellons 1-cell wood fuel combustion system (primary thermal oil heater) c. One MEC dry fuel burner (dedicated to dryers) d. One natural gas burner (dedicated thermal oil heater backup) e. One natural gas burner (dedicated MEC burner backup) f. Four flake dryers (#1-4)	a. 160 x 10^6 BTU/hr heat input b. 50 x 10^6 BTU/hr heat input c. 50 x 10^6 BTU/hr heat input d. 50 x 10^6 BTU/hr heat input e. 50 x 10^6 BTU/hr heat input f. 50 dry tons/hr, input (combined)	Four multiclones (one per flake dryer) Two Smith Engineering Company 8-canister direct flame regenerative thermal oxidizers (RTO)	N/A RTO 1-2	PM/PM-10 VOC, CO, PM/PM-10	February 5, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
3100	15	Screen fines transfer system	5.0 dry tons/hr	Pneumafil – 6.5-92-10 fabric filter	BH-6	PM/PM-10	February 5, 2009
3200	16	Dry waste transfer system	3.8 dry tons/hr	Pneumafil – 6.5-92-10 fabric filter	BH-5	PM/PM-10	February 5, 2009
3300	18	Sanderdust/hog fuel storage/transfer system	15.1 dry tons/hr	Pneumafil – 6.5-92-10 fabric filter	BH-8	PM/PM-10	February 5, 2009
3400	19	Grit fines transfer system	0.8 dry tons/hr	MAC 72 – MCF 22 fabric filter	BH-9	PM/PM-10	February 5, 2009
3500	20	Fuel screen fines storage bin/MEC raw fuel transfer system	10.5 dry tons/hr	MAC 72 – AVR 52 fabric filter	BH-10	PM/PM-10	February 5, 2009
3600	21	Dry fuel hammermill/MEC prepared fuel transfer system	11.5 dry tons/hr	MAC 144 – AVR 153 fabric filter	BH-11	PM/PM-10	February 5, 2009
4000	Fugitive	Dry flake storage/conveying/blending system including five (5) blenders	44.0 dry tons/hr	None	N/A	N/A	February 5, 2009
5000	54	Board press	40 dry tons/hr	Regenerative Catalytic/Thermal Oxidizer	RCO/RTO-1	VOC, CO, PM/PM-10	February 5, 2009
5100	13	Forming & finishing end pickups system	44.0 dry tons/hr	Pneumafil – 11.5-316-10 fabric filter	BH-1	PM/PM-10	February 5, 2009
5200	17	Mat reject system	2.1 dry tons/hr	Pneumafil – 13.5-448-10 fabric filter	BH-7	PM/PM-10	February 5, 2009
6100	12	Panel sanding/tongue & groove system	22.7 dry tons/hr	Pneumafil – 13.5-448-10 fabric filter	BH-4	PM/PM-10	February 5, 2009
6200	7-345	Edge seal spray booth	10.0 gal/hr	Wash water filter	WW-1	PM/PM-10	February 5, 2009
9100	14a	General plant dedusting - system A	0.1 dry tons/hr	Pneumafil – 13.5-448-10 fabric filter	BH-2	PM/PM-10	February 5, 2009
9200	14b	General plant dedusting - system B	0.1 dry tons/hr	Pneumafil – 13.5-358-10 fabric filter	BH-3	PM/PM-10	February 5, 2009
D027	D027	Fire pump emergency generator	208 HP	None	N/A	N/A	N/A
D029	D029	Emergency generator	465 HP	None	N/A	N/A	N/A

EMISSIONS INVENTORY

Emissions are summarized in the following tables.

	2010 Criteria Pollutant Actual Emissions in Tons/Year				
Emission Unit	VOC	CO	SO_2	PM-10	NO_x
1000/1350	N/A	N/A	N/A	2.4	N/A
1100	N/A	N/A	N/A	2.8	N/A
1200	N/A	N/A	N/A	3.6	N/A
1300	N/A	N/A	N/A	8.6	N/A
3000	47.9	32.0	22.7	43.9	128.3
3100	N/A	N/A	N/A	0.9	N/A
3200	14.3	N/A	N/A	1.7	N/A
3300	10.0	N/A	N/A	1.3	N/A
3400	N/A	N/A	N/A	0.3	N/A
3500	0.0	N/A	N/A	0.0	N/A
3600	0.0	N/A	N/A	0.0	N/A
4000	26.2	N/A	N/A	N/A	N/A
5000	15.2	67.1	0.1	11.2	29.5
5100	N/A	N/A	N/A	9.4	N/A
5200	N/A	N/A	N/A	14.1	N/A
6100	5.9	N/A	N/A	14.7	N/A
6200	0.3	N/A	N/A	0.1	N/A
9100	N/A	N/A	N/A	12.0	N/A
9200	N/A	N/A	N/A	10.2	N/A
D027	0.0	0.0	0.0	0.0	0.0
D029	0.0	0.0	0.0	0.0	0.0
Total	119.8	99.1	22.8	137.2	157.8

Pollutant	2010 Hazardous Air Pollutant Actual Emissions in Tons/Yr
Styrene	1.7
Formaldehyde	5.4
Methanol	30.6
Phenol	1.8
Hydrogen Chloride	17.2
Acrolein	1.0
Acetaldehyde	1.9
Manganese Compounds	1.4

EMISSION UNIT APPLICABLE REQUIREMENTS – Wellons/Flake Dryer System

The source has emission unit specific applicable requirements for the Wellons/flake dryer system. The sources of applicable requirements for the Wellons/flake dryer system are as follows: The 2/5/2009 NSR permit; 40 CFR 63 Subparts A and DDDD (MACT standard for plywood and composite wood products manufacturing) and the 40 CFR 64 Compliance Assurance Monitoring (CAM) requirements.

Limitations

2/5/2009 NSR permit
Conditions #4-6 of the NSR permit contain criteria pollutant control equipment requirements (four multiclones, one settling chamber and two RTOs for PM/PM-10 control; the two RTOs also control VOC, CO and formaldehyde) for the Wellons/flake dryer system and have been included as Conditions #1-3 of the proposed TV permit.

Conditions #14-15 of the NSR permit specify the approved fuels for combustion equipment comprising the Wellons/flake dryer system and have been included as Conditions #4-5 of the proposed TV permit.

Conditions #17-18 of the NSR permit contain throughput limits (wood fuel burned, wood flakes dried) for the Wellons/flake dryer system and have been included as Conditions #6-7 of the proposed TV permit.

Conditions #31 and #37 of the NSR permit contain hourly and annual criteria pollutant emission limits and the applicable opacity standard for the Wellons/flake dryer system and have been included as Conditions #8-9 of the proposed TV permit.

40 CFR 63 Subpart DDDD
Condition #17 of the proposed TV permit contains a reference to Section IV of the TV permit for the 40 CFR 63 Subpart DDDD MACT requirements of the Wellons/flake dryer system. Section IV (Conditions #55-69 of the proposed TV permit) includes the emission standards (90% control of HAP), monitoring, recordkeeping and reporting requirements of the Subpart DDDD for the Wellons/flake dryer system.

Monitoring/Testing/Recordkeeping/Reporting

2/5/2009 NSR permit
With one exception, the monitoring, testing and recordkeeping requirements in Conditions #8, #26 and #41-42 of the NSR permit have been examined and determined to meet Part 70 requirements as is. Condition #8 requires continuous monitoring of the two Wellons/flake dryer system RTO's retention chamber temperatures, outlet volumetric flow rates, ID fan inlet static pressures and isolation dampers positions. Condition #26 requires a biennial performance test of the Wellons/flake dryer system's VOC control device (RTO). Condition #42 requires the reporting of any of these parameters that deviate from the values established during performance testing the RTOs. In this way, the RTOs are demonstrated to meet the control requirements of the NSR permit. In conjunction with the annual throughput and emission factor records of Condition #41, this monitoring scheme also serves to demonstrate compliance with the emission limits of Condition #31 of the NSR permit. The annual throughput records of Condition #41 also directly demonstrate compliance with the fuel/throughput requirements of Conditions #14-15 and #17-18. These requirements have been included as Conditions #10-11, #14 and #16 of the proposed TV permit.

The aforementioned exception is that the NSR permit does not contain any periodic monitoring for the opacity standard of Condition #37. To provide a reasonable assurance of compliance with this standard, Conditions #12, #14.f and #15 were added to the proposed TV permit. These conditions require weekly visible emission observations of the RTO stacks, corrective action to any unit where any visible emissions are observed, and associated recordkeeping and reporting.

40 CFR 63 Subpart DDDD
By definition, Part 63 MACT standards are presumed to include sufficient monitoring, recordkeeping and reporting requirements to satisfy both periodic monitoring and CAM requirements.

CAM
For the Wellons/flake dryer system, CAM is applicable for three pollutants: VOC, CO, and PM/PM-10. This is because for each of these pollutants, there is an applicable emission limitation (from Condition #31 of the 2/5/2009 NSR permit), there is a control device that allows the emission limitation to be achieved (the Wellons/flake dryer RTOs) and the pre-controlled potential emissions for each pollutant equals or exceeds the major source emission level for that pollutant (100 tons/yr for each). Accordingly, GP submitted a CAM plan for the Wellons/flake dryer system RTOs. In summary, GP's CAM proposal is to continuously monitor the RTO combustion chamber temperatures and flow rates to insure that the RTOs are providing the time and temperature necessary to control the subject pollutants. DEQ has reviewed, and with the issuance of the TV permit with the CAM plan included as Attachment A, and hereby approves the Wellons/flake dryer system CAM plan. Condition #13 of the proposed TV permit makes reference to the CAM plan attachment and to Section VI of the proposed TV permit (general CAM requirements).

EMISSION UNIT APPLICABLE REQUIREMENTS – Board Press

The source has emission unit specific applicable requirements for the board press. The sources of applicable requirements for the board press are as follows: The 2/5/2009 NSR permit; 40 CFR 63 Subparts A and DDDD (MACT standard for plywood and composited wood products manufacturing) and the 40 CFR 64 CAM requirements.

Limitations

2/5/2009 NSR permit
Condition #7 of the NSR permit contains criteria pollutant control equipment requirements for the board press (one regenerative catalytic/regenerative thermal oxidizer system (RCO/RTO) for VOC control) and has been included as Condition #18 of the proposed TV permit.

Condition #19 of the NSR permit contains throughput limits (wood flakes processed) for the board press and has been included as Condition #19 of the proposed TV permit.

Conditions #32 and #38 of the NSR permit contain hourly and annual criteria pollutant emission limits and the applicable opacity standard for the board press and have been included as Conditions #20-21 of the proposed TV permit.

40 CFR 63 Subpart DDDD
Condition #34 of the proposed TV permit contains a reference to Section IV of the TV permit for the 40 CFR 63 Subpart DDDD MACT requirements of the board press. Section IV (Conditions #55-69 of the proposed TV permit) includes the emission standards (90% control of HAP), monitoring, recordkeeping and reporting requirements of the Subpart DDDD for the board press.

Monitoring/Testing/Recordkeeping/Reporting

2/5/2009 NSR permit
With one exception, the monitoring, testing and recordkeeping requirements in Conditions #9, #23-25, #27-29 and #41 of the of the NSR permit have been examined and determined to meet Part 70 requirements as is. Condition #9 requires continuous monitoring of the RCO/RTO firebox temperature when operating in RTO mode and the RCO/RTO combustion chamber temperature when operating in RCO mode. Conditions #23-25 and #28 require an initial performance test (PM, NOx, CO, VOC, VOC control efficiency and visible emissions) for the RCO/RTO within 60 days of the date that is begins operation in RTO mode. A similar initial performance test has already been completed for the unit in RCO mode. Condition #29 requires GP to establish a minimum RTO mode operating temperature during the

initial RTO mode performance test and to operate the unit in accordance with that temperature after the initial performance test. The condition requires that the unit operate at a minimum temperature of 700 °F while in RCO mode (this value was established in the RCO mode initial performance test). Condition #27 requires the source to conduct an annual catalyst activity test of the RCO/RTO when operating in RCO mode. Using these methods, the RCO/RTO is demonstrated to meet the control requirements of the NSR permit. In conjunction with the annual throughput and emission factor records of Condition #41, this monitoring scheme also serves to demonstrate compliance with the emission limits of Condition #32 of the NSR permit. The annual throughput records of Condition #41 also directly demonstrate compliance with the throughput requirement of Condition #19 of the NSR permit. These requirements have been included as Conditions #22-28 and #32 of the proposed TV permit.

The aforementioned exception is that the NSR permit does not contain any periodic monitoring for the opacity standard of Condition #38. To provide a reasonable assurance of compliance with this standard, Conditions #29, #32.f and #33 were added to the proposed TV permit. These conditions require weekly visible emission observations of the RCO/RTO stack, corrective action to any unit where any visible emissions are observed, and associated recordkeeping and reporting.

40 CFR 63 Subpart DDDD
By definition, Part 63 MACT standards are presumed to include sufficient monitoring, recordkeeping and reporting requirements to satisfy both periodic monitoring and CAM requirements.

CAM
For the board press, CAM is applicable for one pollutant: VOC. This is because there is an applicable emission limitation (from Condition #32 of the 2/5/2009 NSR permit), there is a control device that allows the emission limitation to be achieved (the RCO/RTO) and the pre-controlled VOC potential emissions equals or exceeds the major source emission level for that pollutant (100 tons/yr for each). Accordingly, GP submitted a CAM plan for the RCO/RTO. In summary, GP's CAM proposal for the RCO/RTO is to adopt the Subpart DDDD RCO/RTO monitoring scheme for HAP control to also demonstrate that the RCO/RTO is achieving its required VOC control. This includes continuously monitoring the RCO/RTO operating temperature and conducting annually catalyst activity tests (when operating in RCO mode). DEQ has reviewed, and with the issuance of the TV permit with the CAM plan included as Attachment B, and hereby approves the board press CAM plan. Condition #30 of the proposed TV permit makes reference to the CAM plan attachment and to Section VI of the proposed TV permit (general CAM requirements).

EMISSION UNIT APPLICABLE REQUIREMENTS – Edge Seal Spray Booth

The source has emission unit specific applicable requirements for the edge seal spray booth. The sources of applicable requirements for the spray booth are as follows: The 2/5/2009 NSR permit and 40 CFR 63 Subparts A and DDDD (MACT standard for plywood and composited wood products manufacturing).

Limitations

2/5/2009 NSR permit
Condition #10 of the NSR permit contains criteria pollutant control equipment requirements for the spray booth (wash water filters for PM/PM-10 control) and has been included as Condition #35 of the proposed TV permit.

Condition #11 of the NSR permit includes a VOC coating content emission standard for the spray booth (0.08 pounds per gallon) and has been included as Condition #36 of the proposed TV permit.

Condition #22 of the NSR permit contains a throughput limit (throughput of paint) for the spray booth has been included as Condition #37 of the proposed TV permit.

Condition #34 of the NSR permit contain hourly and annual criteria pollutant emission limits for the spray booth and has been included as Condition #38 of the proposed TV permit.

40 CFR 63 Subpart DDDD
Condition #41 of the proposed TV permit contains a reference to Section IV of the TV permit for the 40 CFR 63 Subpart DDDD MACT requirements of the spray booth. Section IV (Conditions #55-69 of the proposed TV permit) includes the emission standards (use of non-HAP coatings), monitoring, recordkeeping and reporting requirements of the Subpart DDDD for the spray booth.

Monitoring/Testing/Recordkeeping/Reporting

2/5/2009 NSR permit
Condition #41 includes recordkeeping requirements for the spray booth (annual throughput of paint, VOC content of each coating (MSDS)) designed to demonstrate compliance with Conditions #11, #22 and #34 (VOC emission limit). The spray booth requirements of Condition #41 have been included as Condition #40 of the proposed TV permit.

In order to satisfy TV periodic monitoring requirements for Conditions #10 and #34 (PM/PM-10 emission limits) of the NSR permit, Conditions #39, #40.b and #40.d have been added to the proposed TV permit. Condition #39 requires a weekly inspection of the spray booth water wash filters and Condition #40.b requires records of these inspections and of any resulting corrective actions. Condition #40.d requires records be retained of emission factors for each pollutant with a limit in Condition #38 of the NSR permit. Together, these requirements serve to provide a reasonable assurance of compliance for the spray booth.

40 CFR 63 Subpart DDDD
By definition, Part 63 MACT standards are presumed to include sufficient monitoring, recordkeeping and reporting requirements to satisfy both periodic monitoring and CAM requirements.

CAM
Since the pre-controlled potential emissions from the spray booth do not equal or exceed the major source emission levels (100 tons/yr), CAM is not applicable to this unit.

EMISSION UNIT APPLICABLE REQUIREMENTS – Woodwaste Material Handling, Collection, Storage, and Transfer systems

The source has emission unit specific applicable requirements for the woodwaste material handling, collection, storage and transfer systems (woodwaste systems). The sources of applicable requirements for the woodwaste systems are as follows: The 2/5/2009 NSR permit and the 40 CFR 64 CAM requirements.

Limitations

2/5/2009 NSR permit
Conditions #2-3 of the NSR permit contain particulate emission control equipment requirements for the woodwaste systems and have been included as Conditions #42-43 of the proposed TV permit.

Conditions #20-21 of the NSR permit contain annual throughput limits (millions of square feet) for the woodwaste systems and have been included as Conditions #44-45 of the proposed TV permit.

Conditions #30, #33 and #36 of the NSR permit contain hourly and annual criteria pollutant emission limits and the applicable opacity standard for the woodwaste systems and have been included as Conditions #46-48 of the proposed TV permit.

Monitoring/Testing/Recordkeeping/Reporting

2/5/2009 NSR permit
Condition #41 includes recordkeeping requirements for the woodwaste systems (annual throughput wood in millions of square feet) designed to demonstrate direct compliance with the throughput limitations of Conditions #20-21 and indirect compliance with the emission limitations of Conditions #30 and #33. In order meet the reasonable assurance of compliance standard of TV periodic monitoring, this existing recordkeeping requirement was supplemented with a requirement that the permittee also keep records of the emission factors used to calculate the emissions of each pollutant (PM/PM-10 and VOC) with an emission limit in Condition #20 or #21. These requirements have been included in Condition #52 of the proposed TV permit.

In order to satisfy TV periodic monitoring requirements for Conditions #2-3 (PM/PM-10 control equipment requirements) of the NSR permit, Conditions #50 and #52.a-b have been added to the proposed TV permit. Condition #50 requires a monthly inspection of the fabric filter differential pressure gauges required by Condition #3 of the NSR permit. Condition #52.b requires records of these inspections and of any resulting corrective actions. Condition #52.a requires records of the annual cyclone integrity inspections (and any resulting corrective actions) required by Condition #2 of the NSR permit. Together, these requirements serve to provide a reasonable assurance of compliance that the PM/PM-10 emissions from the woodwaste systems are being controlled as required.

Since the NSR permit does not contain any compliance demonstration method for the opacity standard of Condition #36, Conditions #49, #52.c and #53 were added to the proposed TV permit to provide a reasonable assurance of compliance with this standard. These conditions require weekly visible emission observations of each woodwaste system not subject to CAM (see below), corrective action to any unit where any visible emissions are observed, and associated recordkeeping and reporting.

CAM
For the woodwaste systems, CAM is applicable for one pollutant: PM/PM-10. This is because there is an applicable emission limitation (from Condition #30 of the 2/5/2009 NSR permit), there is a control device that allows the emission limitation to be achieved (the fabric filters required by Condition #3) and the pre-controlled PM/PM-10 potential emissions equals or exceeds the major source emission level for that pollutant (100 tons/yr for each). The one exception to this is the Green Chip Handling System (1000/1350). The pre-controlled potential emissions for this unit are less than 100 tons/yr, so CAM is not applicable. Accordingly, GP submitted a single CAM plan that applies to each remaining woodwaste system. In summary, GP's CAM proposal for the woodwaste system fabric filters is to conduct daily visible emission observations and perform corrective action for any observation that reveals the presence of any visible emissions. This proposal closely tracks CAM Illustration No. 1a of Appendix B of EPA's 1998 *CAM Technical Guidance Document* and is based on the fact that well operated fabric filters should not emit any visible emissions. DEQ has reviewed, and with the issuance of the TV permit with the CAM plan included as Attachment C, and hereby approves the woodwaste systems' CAM plans. In reviewing/approving the proposed CAM plan, DEQ considered (1) the variability of the emissions from the woodwaste material handling systems (there is very little variability), (2) the likelihood of a violation (no history of compliance issues with the GP-Skippers woodwaste material transfer systems; well operated fabric filters should have little difficulty achieving 0.01 gr/dscf), (3) the type/frequency of monitoring for similar units at other facilities (daily visible emission monitoring has been specified as CAM for material handling systems at other GP facilities in Virginia; i.e. GP-Brookneal), and (4) the small/large CAM status of the emission units (since the post-control PTE for each system is less than major source levels, each PSEU is considered to be "small" for CAM purposes). These factors were considered in accordance with EPA's 2009 *Citgo* TV petition determination. Condition #51 of the proposed TV permit makes reference to the CAM plan attachment and to Section VI of the proposed TV permit (general CAM requirements).

Since the CAM visible emission observation frequency (daily) is more stringent than the proposed periodic monitoring visible emission observation frequency (weekly), the CAM plan sufficiently meets all Title V monitoring for these units.

EMISSION UNIT APPLICABLE REQUIREMENTS – Emergency Generators

The source has emission unit specific applicable requirements for the emergency generators. The source of applicable requirements for the emergency generators is 40 CFR 63 Subparts A and ZZZZ (MACT standard for reciprocating internal combustion engines).

40 CFR 63 Subpart ZZZZ
Condition #54 of the proposed TV permit contains a reference to Section V of the TV permit for the 40 CFR 63 Subpart ZZZZ requirements of the emergency generators. Section V (Conditions #70-76 of the proposed TV permit) includes the work practice requirements, monitoring, recordkeeping and reporting requirements of the Subpart ZZZZ for the emergency generators.

EMISSION UNIT APPLICABLE REQUIREMENTS – 40 CFR 63 Subparts A and DDDD (National Emissions Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products)

As previously noted, the source has emission unit specific applicable requirements for the Wellons/flake dryer system, the board press and the paint spray booth from 40 CFR 63 Subparts A and DDDD. Section IV of the proposed TV permit contains the specific requirements of this MACT for the facility. The specific requirements include:

- 90% HAP reduction requirement from 63.2240(b) – Proposed Condition #55
- RTO temperature monitoring requirements from 63.2267 – Proposed Condition #55
- No HAP coating requirement from 63.2241 – Proposed Condition #56
- General operation and duty requirements from 63.2250(a-b) – Proposed Conditions #57-58
- SSM Plan requirement from 63.2250(c) – Proposed Condition #59
- Initial compliance demonstration requirements from 63.2260(b) – Proposed Condition #60
- General continuous parameter monitoring system requirements from 63.2269 and 63.2270 – Proposed Conditions #61-63
- Performance testing requirements from 63.2260(a) and 63.2262 – Proposed Conditions #64-65
- Notification requirements from 63.2280 – Proposed Condition #66
- Reporting requirements from 63.2271 and 63.2281 – Proposed Condition #67
- Recordkeeping requirements from 63.2282 and 63.2283 – Proposed Condition #68
- General MACT compliance requirement for Subparts A and DDDD – Proposed Condition #69

By default, the MACT testing, monitoring, recordkeeping and reporting requirements are deemed sufficient for periodic monitoring and CAM purposes (40 CFR 64.1).

EMISSION UNIT APPLICABLE REQUIREMENTS – 40 CFR 63 Subparts A and ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE))

As previously noted, the source has emission unit specific applicable requirements for the emergency generators from 40 CFR 63 Subparts A and ZZZZ. Section V of the proposed TV permit contains the specific requirements of this MACT for the facility. The specific requirements include:

- Work Practice requirements for oil, oil filter, air cleaner and hose/belt inspections/maintenance from Table 2C of 40 CFR 63 Subpart ZZZZ – Proposed Condition #70
- Engine operation/maintenance plant requirements from 63.6625(e) – Proposed Condition #71
- Hours of operation requirements from 63.6640(f) – Proposed Condition #72
- Non-resettable hour meter requirements from 63.6625(f) – Proposed Condition #73
- Reporting Requirements from 63.6650 – Proposed Condition #74
- Recordkeeping Requirements from 63.6655 – Proposed Condition #75
- General MACT compliance requirement for Subparts A and ZZZZ – Proposed Condition #76

It should be noted that, for the purposes of 40 CFR 63 Subpart ZZZZ, GP's emergency generators are considered existing emergency compression ignition RICE with capacities of 500 horsepower or less. Because of this classification and because they are located at major source, many of the other Subpart ZZZZ requirements (emission standards, performance tests, fuel standards, NOCS reports, initial notifications) are not applicable.

By default, the MACT testing, monitoring, recordkeeping and reporting requirements are deemed sufficient for periodic monitoring and CAM purposes (40 CFR 64.1).

EMISSION UNIT APPLICABLE REQUIREMENTS – Facility-Wide Conditions

The source has facility-wide applicable requirements from two sources: The 2/5/2009 NSR permit and the new and modified source opacity standard, 9 VAC 5-50-50.

Limitations

2/5/2009 NSR permit
Conditions #12 of the NSR permit contains fugitive dust control measures for the facility's vehicular traffic and has been included as Condition #88 of the proposed TV permit.

Condition #13 of the NSR permit contains general fugitive dust emission control requirements and has been included as Condition #89 of the proposed TV permit.

Condition #35 of the NSR permit contains facility-wide hourly and annual criteria pollutant emission limits and has been included as Condition #90 of the proposed TV permit.

Condition #39 of the NSR permit contains a facility-wide fugitive emission visible emission limit and has been included as Condition #91 of the proposed TV permit.

Condition #49 of the NSR permit contains facility-wide work practice maintenance and operation requirements and has been included as Condition #93 of the proposed TV permit.

9 VAC 5-50-50
The new source opacity limit (20% opacity) is applied to the edge seal spray booth and the emergency generators since these are new and modified emission units that did not receive a specific opacity limit in the NSR permit. All other equipment at the facility were included in an opacity limit from the NSR permit. This standard has been included as Condition #92 of the proposed TV permit.

Monitoring/Testing/Recordkeeping/Reporting

2/5/2009 NSR permit
Since the NSR permit does not contain any compliance demonstration method for the opacity standards of Condition #39, Conditions #94, #96.a and #97 were added to the proposed TV permit to provide a reasonable assurance of compliance with this standard. These conditions require weekly visible emission observations of each fugitive emission point, corrective action to any unit where any visible emissions are observed, and associated recordkeeping and reporting.

These opacity monitoring conditions also serve to demonstrate a reasonable assurance of compliance with the fugitive dust control requirements of Conditions #12-13 of the NSR permit; i.e. if these units are complying with their opacity requirements, then this is also a good indication that fugitive dust emissions are being adequately controlled.

No monitoring is required for the emission limitations of Condition #35 of the NSR permit since the limits of this condition are the simple arithmetic sum of the other permit limits of the NSR permit (Conditions #8,

#20, #38, #46 and #47 of the proposed TV permit). Since sufficient monitoring for these underlying limits already exists (as previously discussed), no additional monitoring is required.

Condition #96.b of the proposed TV permit was added to serve as a compliance mechanism for the good operating practice requirements of Condition #49 of the NSR permit. This condition requires recordkeeping of the appropriate maintenance and operator training activities.

9 VAC 5-50-50
Since there was no existing compliance demonstration method for the opacity standard of 9 VAC 5-50-50, Conditions #95, #96.a and #97 were added to the proposed TV permit to provide a reasonable assurance of compliance with this standard. These conditions require weekly visible emission observations of the spray booth and emergency generators (when operated), corrective action to any unit where any visible emissions are observed, and associated recordkeeping and reporting.

STREAMLINED/OBSOLETE REQUIREMENTS

Certain conditions of the NSR permit are obsolete, no longer serve any meaningful purpose, and are unnecessary for Title V considerations. Condition #1 contains an equipment list which is supplanted by the TV permit's Section II emission unit table whereas Condition #43 contains a generic reference to 40 CFR 63 Subpart DDDD which is supplanted by Section IV of the Title V permit. Condition #16 contains performance testing port requirements that are supplanted by a similar condition (Condition #98 of the proposed TV permit) from the TV permit boilerplate.

Condition #44 is not being included as an applicable requirement in the Title V permit because the condition, which voids the permit if modification is not commenced within 18 months, is obsolete and environmentally insignificant. This determination is consistent with the conditions set down in the White Paper dated July 10, 1995 because the modification outlined in the permit has already been accomplished.

Conditions #45 and #46 are not being included as applicable requirements in the Title V permit because their provisions are included in the Conditions #IX.C, E and F of the Title V permit and are included as part of the malfunction reporting requirements for the overall permit. Including these conditions as separate enforceable conditions on the permitted equipment in addition to the entire listing of equipment covered by the TV permit creates a situation where conditions are both redundant and confusing.

Conditions #47 is not being included as an applicable requirement in the Title V permit because it is out-dated. The Part 70 regulations define specific inspection and entry requirements consistent with the issuance of a Title V permit. These requirements are described in Condition #IX.Q of the Title V permit and are at least as stringent as the NSR requirements. Inclusion of this condition would be redundant and the requirements have been overtaken by the Title V (Part 70) regulations.

Condition #50 is not being included as an applicable requirement in the Title V permit because the condition defines the causes for modification or revocation of an NSR permit which can be considered extraneous to the Title V permit. The assumption underlying this determination is that if an NSR permit is revoked or modified through unsolicited action by DEQ, the Title V permit will be changed in a separate and independent action from the NSR change. The Title V permit will change to reflect the changes in applicable requirements brought about by the NSR change.

Condition #51 is not being included as an applicable requirement in the Title V permit because it is redundant. Condition #IX.T of the Title V permit describes the requirements for transfer of ownership relative to the Title V permit. The transfer of ownership requirement for the NSR permit is therefore inappropriate for inclusion in the Title V permit.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

Proposed Condition #IX.B - Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

Proposed Condition #IX.F - Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

Proposed Condition #IX.U - Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in Condition #IX.U and Condition #IX.F. For further explanation see the comments on Condition #IX.F.

FUTURE APPLICABLE REQUIREMENTS

The facility is a major source of hazardous air pollutants. Maximum achievable control technology standards (MACT) for industrial, commercial and institutional boilers and process heaters, under 40 CFR Part 63, were proposed on June 4, 2010. When finalized, the facility (Wellons/flake dryer system) will be subject to those requirements.

INAPPLICABLE REQUIREMENTS

This section of the SOB has been selected for the discussion of the source's New Source Performance Standard (NSPS) status.

The original draft TV renewal permit included NSPS Subpart Db requirements for the Wellons/flake dryer system. These requirements were included based on the following:

- As detailed in GP's 7/12/99 letter, the Wellons wood burner was originally constructed with 4 cells and a maximum rated heat input capacity of 160 MMBtu/hr in 1984/1985.
- As detailed in GP's 7/12/99 letter, the Wellons wood burner was modified with the addition of a 5th cell in 1988/1989. This 5th cell raised the maximum rated heat input capacity to 210 MMBtu/hr
- The applicability of NSPS Subpart Db for modified emission units is solely base upon three factors:

1. Status as a steam generation unit (SGU) – The NSPS defines a SGU as a device that combusts any fuel or byproduct/waste and produces steam or heats water or any other heat transfer medium. The Wellons wood burner combusts fuel (wood) and heats an "other heat transfer medium" (thermal oil), therefore it is a SGU.
2. The date of modification – As discussed above, the Wellons wood burner was modified after the NSPS applicability date of June 19, 1984 (40 CFR 60.40b(a)).
3. The maximum rated heat input capacity – As discussed above, the Wellons wood burner's heat input capacity is greater than the NSPS applicability threshold of 100 MMBtu/hr (40 CFR 60.4b(a)).
4. Since all three criteria are satisfied, the Skippers Wellons wood burner is subject to NSPS Subpart Db.

- GP's 7/12/99 letter argues that since the Wellons wood burner's thermal oil heater has a heat transfer capacity (30 MMBtu/hr) below the Subpart Db threshold (100 MMBtu/hr), that the Wellons wood burner should not be subject to Subpart Db. However, as discussed above, the heat transfer capacity of a unit is not a NSPS applicability criteria. The only heat capacity that matters is the heat input capacity from fuels combusted in the steam generating unit.

However, based on further review of the technical details of the Wellons/flake dryer system, information submitted by GP dated July 1, 2009 and recent EPA NSPS applicability determinations, DEQ now believes that NSPS does not apply to the Wellons/flake dryer system.

Consistent with EPA's December 20, 2006 NSPS Subpart Db applicability determination for Louisiana-Pacific (LP) Corporation's Thomasville, Alabama OSB mill, DEQ has now determined that the construction of the 5th cell in 1988/1989 was not a modification (subject to NSPS Db) of the existing 160 MMBtu/hr steam generating unit (SGU). Instead, the construction of the 5th cell was actually the construction of a new SGU. In the LP determination, EPA ruled that two 187 MMBtu/hr bark burners constituted two separate NSPS SGUs even though both burners serve one (16% of total exhaust flow) thermal oil heater. In this case, the fact that 5th cell is physically separated from the original four cells, separately controlled from the original four cells and is primarily dedicated to the thermal oil heater further reinforces the two SGU scenario. When evaluated as a separate SGU, the inapplicability of the NSPS to the 5th cell is clear. Since maximum rated heat input capacity of the unit is 50 MMBtu/hr, NSPS Subpart Db is not applicable due to size (only applies to 100 MMBtu/hr and greater SGUs). Since the 5th cell was constructed beginning in 1988, NSPS Subpart Dc is not applicable due to construction date (only applies to units constructed/modified after June 9, 1989). There are therefore no NSPS requirements for the Wellons/flake dryer system.

Because all of the significant emission units at the source are included in the NSR permit and meet BACT requirements, there are no Part IV (Chapter 40) standards that apply to any of the emission units.

GREENHOUSE GAS (GHG) REQUIREMENTS

There are no applicable GHG permitting requirements for this source.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
1400	Fuel hog	5-80-720 B.	PM/PM-10	33.3 tons/hr.
1500	Green truck bin	5-80-720 B.	PM/PM-10	6,000 ft^3
3700	Super fines truck bin	5-80-720 B.	PM/PM-10	12,400 ft^3
3750	Screen fines truck bin	5-80-720 B.	PM/PM-10	18,800 ft^3
3800	Dry fuel silo	5-80-720 B.	PM/PM-10	9,600 ft^3
3850	Sanderdust silo	5-80-720 B.	PM/PM-10	4,600 ft^3
3900	Raw fuel storage bin (MEC dry fuel burner)	5-80-720 B.	PM/PM-10	3,600 ft^3
3950	Prepared fuel metering bin (MEC dry fuel burner)	5-80-720 B.	PM/PM-10	1,800 ft^3
T1	10,000 gallon diesel fuel storage tank	5-80-720 B.	VOC	10,000 gallons
T2	300 gallon gasoline storage tank	5-80-720 B.	VOC	300 gallons
T3	300 gallon diesel fuel storage tank	5-80-720 B.	VOC	300 gallons
T4, T5	1,000 gallon hydraulic oil storage tanks	5-80-720 B.	VOC	1,000 gallons each
T6	345 gallon used oil storage tank	5-80-720 B.	VOC	345 gallons
T7, T8, T9	275 gallon hydraulic oil storage tanks	5-80-720 B.	VOC	275 gallons each
T10, T11	275 gallon diesel fuel storage tanks	5-80-720 B.	VOC	275 gallons each
T12, T13	10,000 gallon wax storage tanks	5-80-720 B.	VOC	10,000 gallons each
T14	1,000 gallon used oil storage tank	5-80-720 B.	VOC	1,000 gallons
T15	15,000 gallon thermal oil storage tank	5-80-720 B.	VOC	15,000 gallons
T16	11,200 gallon hydraulic oil use tank	5-80-720 B.	VOC	11,200 gallons
T17	500 gallon hydraulic oil storage tank	5-80-720 B.	VOC	500 gallons
T18, T19, T20, T21	10,000 gallon resin storage tanks	5-80-720 B.	VOC	10,000 gallons each

CONFIDENTIAL INFORMATION

No information has been claimed as confidential business information by the permittee.

PUBLIC PARTICIPATION

The public notice for the draft permit appeared in the November 3, 2010 edition of the Richmond Times-Dispatch. The 30-day public comment period began on November 4, 2010 and ended on December 3, 2010. During this period, the only comments received were from GP in a letter dated December 1, 2010. The primary comment raised by GP was that certain emission limits in the draft permit should be adjusted based upon new emission factors. After discussions with DEQ staff, GP submitted a second letter dated April 15, 2011 acknowledging that the February 5, 2009 minor NSR permit would have to be modified before any such changes to the TV permit and that the modification of the minor NSR permit should take place after the TV permit is issued. Based upon GP's April 15, 2011 letter, DEQ sent a letter, dated May 24, 2011, informing GP that DEQ considered the comments from the December 1, 2010 letter to be withdrawn. Other than the following administrative clarifications, there have been no changes to the proposed permit. These clarifications were:

1. the substitution of Subpart ZZZZ for Subpart DDDD in the citation of Condition #54;
2. the addition of the Subpart ZZZZ compliance date in Section V;
3. the revision of Condition #99 to state that DEQ *may* consider the source of an emission limit when determining what test method to use if testing in addition to that required by the TV permit was required; and
4. the revision of the text of GP's CAM plans to clearly tie indicator ranges to performance test results.

The proposed permit and associated documents were transmitted to EPA on October 26, 2010, and the EPA 45-day review period began on November 4, 2010. The EPA review period concluded on December 18, 2010, and no comments were received from EPA. EPA was informed of GP's December 1, 2010 comments and the related documents discussed above in a May 24, 2011 email. EPA responded on May 25, 2011 that they required no additional review of the proposed permit and that they still had no comments on the proposed permit.